

Title (en)
METHOD OF DATA DELIVERY ACROSS A NETWORK

Title (de)
VERFAHREN ZUR DATENABLIEFERUNG ÜBER EIN NETZWERK

Title (fr)
PROCÉDÉ DE DISTRIBUTION DE DONNÉES SUR UN RÉSEAU

Publication
EP 2316202 B1 20180815 (EN)

Application
EP 09769561 A 20090623

Priority
• GB 2009001574 W 20090623
• GB 0811813 A 20080627

Abstract (en)
[origin: GB2461132A] The present invention relates to a method of managing congestion in a multi-path network, the network having a plurality of network elements 18 arranged in a plurality of switch stages and a plurality of network links 17 interconnecting the network elements, the method comprising the steps of detecting congestion on a network link, the congested network link interconnecting the output port of a first network element with a first input port of a second network element in a subsequent switch stage; identifying an uncongested network link connected to a second input port of said second network element; and directing future data packets on a route across the multi-path network which includes the identified uncongested network link. Also provided is a multi-path network and an Ethernet bridge or router incorporating such a multi-path network. Each network element in the network may be configured to employ the above method. Congestion may be detected based on a depth of packet buffers, possibly compared to a threshold. The first network element may convey to the second network element the detected congestion, possibly using a congestion tag. The congested network link may be continued to be used even after congestion has been detected. The multi-path network may have at least one degree of symmetry and future data packets may be re-routed by a network element in a switch stage symmetric with the switch stage of the second network element.

IPC 8 full level
H04L 45/125 (2022.01); **H04L 45/24** (2022.01); **H04L 47/31** (2022.01); **H04L 47/56** (2022.01); **H04L 49/111** (2022.01)

CPC (source: EP GB US)
H04L 43/0876 (2013.01 - GB); **H04L 45/00** (2013.01 - EP GB); **H04L 45/125** (2013.01 - EP GB US); **H04L 45/22** (2013.01 - EP GB US); **H04L 45/24** (2013.01 - US); **H04L 47/11** (2013.01 - US); **H04L 47/122** (2013.01 - US); **H04L 47/31** (2013.01 - US); **H04L 47/56** (2013.01 - US); **H04L 49/501** (2013.01 - EP GB US); **H04L 43/16** (2013.01 - GB); **H04L 49/101** (2013.01 - EP US); **H04L 49/1515** (2013.01 - EP US); **H04L 49/253** (2013.01 - EP US); **H04L 49/3018** (2013.01 - EP US); **H04L 49/3045** (2013.01 - EP US); **H04L 49/351** (2013.01 - EP US); **H04L 49/505** (2013.01 - EP GB US); **H04L 49/506** (2013.01 - EP US); **H04L 2012/5682** (2013.01 - GB)

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)
GB 0811813 D0 20080730; **GB 2461132 A 20091230**; **GB 2461132 B 20130213**; CN 102084627 A 20110601; CN 102084627 B 20151007; EP 2316202 A1 20110504; EP 2316202 B1 20180815; EP 3484108 A1 20190515; EP 3484108 B1 20200909; US 2011090797 A1 20110421; US 2016142318 A1 20160519; US 8908529 B2 20141209; US 9729450 B2 20170808; WO 2009156720 A1 20091230

DOCDB simple family (application)
GB 0811813 A 20080627; CN 200980123584 A 20090623; EP 09769561 A 20090623; EP 18188902 A 20090623; GB 2009001574 W 20090623; US 201414562347 A 20141205; US 99760409 A 20090623